



Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

SECTOR 3 —CHART INFORMATION

SECTOR 3

MOZAMBIQUE CHANNEL—BAIA DE INHAMBANE TO CABO DELGADO

Plan.—This sector describes the SE coast of Africa, on the W side of Mozambique Channel, from Baia de Inhambane NNE to Cabo Delgado.

General Remarks

3.1 Between **Ponta Algoa** (23° 38'S., 35° 26'E.) and Ponta da Barra Falsa the coast has no conspicuous features, but 10 miles to the S of the latter point the Sylvia Ridge of bare sand is 114m high; this ridge is of a reddish color.

The coast between Ilha Santa Carolina (21° 37'S., 35° 21'E.) and Ponta Macovane is little known.

Between the Sofala River (20° 10'S., 34° 45'E.) and the Rio Buzi the land is low and there are no landmarks.

Between Ponta Macuti (19° 51'S., 34° 54'E.) and the Sambazo, River the coast rises slightly and is bounded by a range of low sandhills. At about mid distance the sandhills are somewhat noticeable, as here there are a number of sharp pointed hills about 61m high, resembling pyramids, and rendered more conspicuous through being without vegetation, as the surrounding country is thick jungle. From the Sambazo River to the W entrance to the Zambezi the land is lower.

Between the Rio Chinde (18° 34'S., 36° 29'E.) and the Rio dos Bons Sinais, the coast is so low that it is seldom seen from the deck of a vessel from a distance of 7 miles.

Between the Rio Bazar (18° 25'S., 36° 38'E.) and the Rio Lind, the coast becomes somewhat higher, and near the latter there are some clumps of trees, while a short distance to the SW of the Rio Linde there are some sandy cliffs which are conspicuous with the morning sun.

3.2 **Baia de Inhambane** (23° 44'S., 35° 30'E.), entered between Ponta da Barra and Ponta Algoa, is almost completely obstructed by banks and breaking reefs which dry in places.

Porto Inhambane is approached by a channel, which leads close to the W shore of Baia de Inhambane. There are two bars in the channel and both are subject to constant change.

The outer bar lies across the channel 3 miles ESE of Ponta Algoa.

The inner bar, where the navigable channel is very narrow, lies about midway between the outer bar and Inhambane. This bar is formed by a number of shoal patches, with depths less than 3m, lying about 1 mile SE and 2 miles SSE of Ponta da Linga-Linga.

Inhambane (23° 52'S., 35° 23'E.)

World Port Index No. 46880

3.3 Inhambane is located at the head of Baia de Inhambane, on the E side of the Rio Inhambane, about 9.7 miles WSW of Ponta da Barra. The port consists of a town and a very small natural harbor.

Winds—Weather.—There is always a heavy swell on the outer bar and with winds between N and SE of more than force 3, vessels should cross on the flood tide as near as possible to HW.

Tides—Currents.—Spring tides rise 3.4m and neap tides rise 2.1m. The tidal currents run with a velocity of from 2 to 4 knots on the bar, and from 1.5 to 2 knots at the anchorage abreast the town. At ebb tide, the current sets toward the pier.

Depths—Limitations.—The outer bar, the outer edge of which lies 3.5 miles ESE of Ponta Algoa, is a shifting one, moving considerably N or S as influenced by the wind or other causes. The Rio Inhambane, although forming a good harbor for vessels of moderate draft, and having a fairly wide entrance, is scarcely navigable for a vessel beyond the town, about 14 miles from the bar.

Aspect.—Ponta Chicucue (23° 47'S., 35° 21'E.) is a conspicuous sandy cliff.

Pilotage.—There is no official pilot, but someone with local knowledge can be made available to assist a vessel entering provided at least 6 hours notice of the time of arrival at the fairway buoy is given to the Port Captain. Local knowledge is essential for entering Inhambane.

Directions.—Local visibility conditions make it advisable that entry should be made on the morning tide.

Caution.—Because of its shifting nature, vessels should not attempt to cross the outer bar without a pilot, unless in possession of the latest local knowledge.

There is always a heavy swell on the bar, and during strong SE winds, the sea often breaks over it, while the ebb tide is running. In such circumstances vessels, with a draft in excess of 3m should await the flood tide before attempting to enter.

Inhambane to Beira

3.4 Between **Ponta Algoa** (23° 39'S., 35° 26'E.) and Ponta da Barra Falsa the coast is backed by hills 130 to 190m high. The only remarkable feature on this part of the coast is a prominent ridge of bare, reddish colored sand, with a fringe of green brush at its base, which lies close to the sea about 10 miles S of Ponta da Barra Falsa.

Baixo Silva (23° 06'S., 35° 34'E.) is a narrow strip of coral, with depths of 5 to 8.2m. The shoal lies 3 miles off and parallels the shoal for about 3 miles.

Ponta da Barra Falsa (22° 55'S., 35° 37'E.) is a low point rising to two small conical sandhills, about 29m high. A considerable amount of sand around the high land over the cape makes it conspicuous from the N. Good shelter may be obtained under the cape during S winds.

A light is exhibited on the summit within Ponta da Barra Falsa.

Shivala Cliffs (22° 45'S., 35° 30'E.) are remarkable red cliffs reaching an elevation of 37m. The cliffs extend N for about 3.5 miles and are prominent, especially during the forenoon.

Maxecane (22° 31'S., 35° 31'E.), a hill 135m high, stands close inland 12 miles N of Shivala Cliffs. The coastal hills in

the vicinity are about 100m high and are red; the cliffs on the seaward slope are a darker red.

A remarkable sand spit, partially covered with scraggy trees and bushes, extends 8 miles N from a position 14 miles N of Maxecane.

Sao Sebastiao Light is exhibited from a position near the S extremity of the above sand spit.

3.5 Cabo Sao Sebastiao (22° 05'S., 35° 28'E.) is a steep bluff, 69m high, which from the S shows a small white sand patch on its upper part, while from the N the face of the cliff shows a considerable amount of red sand from base to summit.

Baixo Zambia (22° 46'S., 35° 35'E.), a coral bank with a least depth of 5.5m, lies 3.7 miles offshore 9.5 miles N of Ponta da Barra Falsa.

Baixo Africa, with a least depth of 4.8m, lies close within the 20m curve 3.5 miles E of Maxecane.

A rocky shoal, with a depth of 5.1m, lies 1 mile offshore 2 miles SSE of Sao Sebastiao Light.

Ilhas dos Bazarutos are a group of islands and sandy islets lying up to 14 miles offshore between Cabo Sao Sebastiao and Ponta Inhassoro (21° 35'S., 35° 15'E.), 33 miles NNW.

Drying banks almost completely fill the S part of the area, which has not been fully examined, and extend some miles E of the islands.

The low coast of the mainland is about 12 miles within the line of breakers at the edge of the drying banks and is indistinct from seaward.

The currents run strongly about Ilhas do Bazarutos, especially on the falling tide.

3.6 Ilha Magaruque (21° 58'S., 35° 26'E.) is 53m high; it may be recognized by some red cliffs in the S part.

Ilha do Bazaruto lies with Ponta Dundo (21° 48'S., 35° 27'E.), its S extremity, about 18 miles N of Cabo Sao Sebastiao. The S extremity of the island rises to a prominent bare hill about 90m high, then it is low for a distance of 4 miles N where it again rises to a bare ridge about 90m high, which extends N for 12 miles before it slopes down to Ponta Dom Carlos.

A light is shown from the N part of Ilha do Bazaruto just S of Ponta Dom Carlos (21° 31'S., 35° 29'E.).

Caution.—Vessels approaching Beira from S should pass about 10 miles off Ponta Dom Carlos Light before setting course for the lighted sea buoy.

3.7 Baía Do Bazaruto (21° 44'S., 35° 21'E.) is entered between Ponta Dom Carlos and Ponta Inhassoro (21° 35'S., 35° 15'E.), on the mainland about 11 miles WSW. Numerous drying banks encumber on considerable part of the bay.

Ilha Santa Carolina (21° 37'S., 35° 20'E.), marked on its N end by a light, is situated in the SW part of Baía do Bazaruto; it is low, but well wooded and has a sandhill on its NE side.

Anchorage.—Anchorages are available in the bay and are approached between the W edge of the bank, which extends SW from Ponta Dom Carlos and a shoal bank about 3 miles WSW, the depths in the entrance being from 18.3 to 22m, decreasing to 12.8m and 14.6m at the anchorage, about 3.5 miles SW of Ponta Dom Carlos, and to 5.5m and 9.1m at the anchorage lying, about 0.3 mile NE of Ilha Santa Carolina.

A pilot may be obtained to take a vessel to the anchorage off Ilha Santa Carolina, and, as the channel is not buoyed, vessels without local knowledge should not attempt to proceed to the anchorage without one.

Anchorage may also be obtained, in more than 18m, about 4.5 miles W of Ponta Dom Carlos.

A vessel found anchorage, sheltered from S winds, on the NE side of Ponta Dom Carlos Spit.

3.8 Between Ponta Dom Carlos and Beira the 200m curve diverges from 3 miles off Ponta Dom Carlos to more than 70 miles offshore at Beira. Within the 200m curve, the bottom is irregular. Numerous isolated shoal patches, with depths of less than 20m, may be encountered up to 45 miles offshore, and depths of less than 9m may be encountered about 25 miles offshore.

The area between the latitudes of Ponta Dom Carlos and Ponta Macovane (21° 10'S., 35° 07'E.) should be navigated with great caution on account of the numerous detached shoals which lie within depths of less than 50m. The outermost of these dangers is an 8m patch situated 16 miles NNE of Bazaruto Light in depths of 30m.

Porto de Bartolomeu Dias (21° 10'S., 35° 07'E.) is entered between Ponta Macovane and Ponta Mafomene, about 5 miles NNW.

Tides—Currents.—On the ebb tide, a strong SE current sets across the outer range line.

Depths—Limitations.—The channel is encumbered by a bar, with depths of from 4.3 to 5.5m, about 1 mile NW of Ponta Macovane, and narrows to its least width, of 0.2 mile between 5m curve, about 1 mile SSE of the bar.

Local knowledge is required.

Ponta Machanga (20° 56'S., 35° 07'E.) is the N extremity of Inhanduge, an island in the delta of the Rio Save. The Rio Save flows into the sea from several shallow mouths, which extend over an area of about 7 miles. Inhanduge is the outermost of the islands in this delta.

Ponta Ingomaimo (20° 42'S., 35° 00'E.) is low and sandy. This point is marked by a light and, since it has no mangroves, it varies from other points in the area. This part of the coast is fronted by shallow ridges, extending nearly 30 miles E. As the land is just visible from the outer edge, care and attention to the soundings must be taken when approaching this locality.

3.9 Porto de Chiloane (20° 37'S., 34° 53'E.) is entered through North Channel close N of Ilha Chiloane. North Breakwater, a sandbank with a least depth of 1.2m, lying about 4.5 miles NE of Ponta Chingune, is a continuation of the extensive bank which fringes the coast N of Ilha Chiloane.

Tides—Currents.—The HW at full and change at Ilha Chiloane is 4 hours 49 minutes; spring tides rise 5.6m and neap tides rise 3.9m. The tidal currents attain a velocity at times from 3 to 4 knots; they set strongly across North Breakwater and North Channel.

Depths—Limitations.—North Channel has a least depth of 2.4m on its bar.

Aspect.—As Ilha Chiloane is low and in many places is only a mangrove swamp intersected by creeks. It has no features, which can be identified from SE. The SE extremity of the island appears as a low bluff when seen from NE.

Pilotage.—It is not advisable to enter either North Channel or South Channel without a pilot. Vessels usually embark a pilot at Inhambane.

Local knowledge is required.

Ilha Buene (20° 27'S., 34° 41'E.) contains an anchorage, known as Port Buene, that is about 3 miles in length by 2 miles in width, with depths from 5 to 8.8m; it is frequently used by small vessels sheltering from bad weather.

Caution.—Vessels should not approach the coast, within a distance of 8 miles between Baía de Sofala (20° 11'S., 34° 43'E.) and the Rio Buzi, about 20 miles N. Within 50 miles of Beira the bottom is irregular and numerous shoals lie in the tracks of shipping approaching the port from both S and E. Caution is necessary when navigating in the whole of this area.

Banco de Sofala (20° 25'S., 35° 27'E.), extending 70 miles E of Baía de Sofala, is an extensive bank which has depths less than 75m; its E edge has not been completely examined.

About 32 miles ENE of Ponta Chingune (20° 37'S., 34° 53'E.) there are isolated shoal depths of 11m, and off Ponta Macuti, in the approach to Beira, there are many shoals, with depths less than 10m. A magnetic anomaly has been reported in the vicinity of position 20° 00'S, 35° 30'E.

Beira (19° 50'S., 34° 50'E.)

World Port Index No. 46890

3.10 Beira, the second most important port in Mozambique, is located on the E bank of the Rio Pungoe; the port consists of a town and a medium sized natural harbor.

Winds—Weather.—Winds are mainly S or SE in the early morning, but become E or SE in the afternoon throughout the year. Between September and April, strong S winds sometimes cause heavy seas on Banco de Sofala and in the entrance channels. The wet season (October to April or May) is the most uncomfortable, the worst months being April and May, but in the four following months the weather becomes more pleasant.

Tides—Currents.—The mean HW interval at Beira is 4 hours 34 minutes; spring tides rise 6.4m and neap tides rise 4m.

The rise of the river, closely resembling that of the Rio Zambezi, begins in December or January, attaining its maximum height about March, when beginning to fall; it reaches its minimum about the end of August, remaining so until October or November.

The tidal currents are very strong, especially in the wet season, with a high river, when the outgoing tidal current may attain a velocity up to 6 knots at springs and from 2 to 3 knots at neaps. In the dry season when the river is low, the velocity of the outgoing tidal current at springs is 4 knots, and at neaps is from 1.5 to 2 knots. The incoming tidal current has a velocity from 1 to 3 knots. The greatest velocities occur near HW.

During springs, the outgoing tidal currents run from 7 to 8 hours and the incoming tidal current from 4 to 5 hours, with hardly any period of slack water.

Allowance should be made for the effect of the tidal currents when entering or leaving, as they set obliquely across the channels in places; neglect of this precaution often leads to vessels grounding, but as the bottom is soft, they usually get off without damage.

Navigation is considered somewhat difficult because of the shallow water and strong currents. The area adjacent to Pungoe Wharf is subject to countercurrents, depending on the strength and direction of the current in the Rio Pungoe.

Depths—Limitations.—Depths are subjects to changes. In 1990, the approach channel and Canal do Macuti were reported to be dredged to a depth of 9m. A depth of 4.2m was reported to exist about 0.2 mile E of the Lighted Buoy No. 1, in the center of the approach fairway.

Vessels with a draft up to 4.9m may enter at any stage of the tide. Maximum draft permissible at any time of the year is 11m at spring tides.

Port facilities are described in the accompanying table:

Beira—Pier Limitations			
Berth	Length	Depth	Remarks
1	176m	7.0m	Fishing vessels only.
2	161m	11.5m	Containers and general cargo.
3	161m	11.5m	Containers and general cargo.
4	161m	11.5m	Containers and general cargo.
5	161m	11.5m	Containers and general cargo.
6	164m	8.2m	Containers and general cargo.
7	164m	8.0m	Containers and general cargo.
8	192m	8.0m	Coal terminal.
9	167m	9.5m	Containers.
10	167m	9.5m	Containers.
11	188m	9.4m	Oil terminal. Tankers up to 25,000 dwt.
12	260m	13.5m	Oil terminal. Tankers up to 50,000 dwt.

Vessels are cautioned that when using Berth No. 11, particular attention should be paid to their moorings as there is a strong current which flows into the stream, from under the jetty, during the ebb. Bow lines are secured to two mooring buoys laid NW of the berth and larger vessels can overgang the berth by up to 60m. Several vessels are reported to have broken off this berth.

Aspect.—The land about the mouth of the Rio Pungoe, being very low, cannot be seen if approaching from the S, until about 11 miles from it, and near the buoys in the approach. Northwards of the river a series of low sandhills covered with scrub extend along the shore.

Ponta Macuti Lighthouse, about 1 mile ENE of the point, is conspicuous, as is the Grand Hotel, about 3.3 miles W of the light structure and the floodlit cathedral, 46m high, about 0.5 mile farther N.

Ponta Macique, on the E side of the entrance of the **Rio Buzi** (19° 53'S., 34° 46'E.), has conspicuous mangroves, about 12.2m high on it.

Buoys may be moved as necessary to conform to the channels.

Pilotage.—Pilotage is compulsory for all vessels with the exception of National fishing vessels and coastal vessels with special permission. The pilot boards 1 mile W of Lighted Buoy P. The pilot normally require a minimum clearance of 0.9m under the keel in the channel

Regulations.—Vessels must send their ETA 48 hours before arrival at the outer channel entrance approach Lighted Buoy A to the Beira Traffic Control Tower. Vessels whose last port of call was Mozambique or Durban must Telex or fax this message to the Beira Traffic Control on departure from that port. Vessels must also send their ETA at the Approach Lighted Buoy A, to the Beira Port Control Tower on VHF channel 12 or 16, 1 hour before arrival at the outer roads of the sea channel. It is compulsory for vessels to announce their arrival on VHF channel 12, on passing the Approach Lighted Buoy A.

Anchorage.—Vessels awaiting entry to Beira should anchor, clear of the Entrance Channel, between Approach Lighted Buoy A and Lighted Buoy P and as near to the latter as draft permits.

Vessels drawing more than 9.1m should have due regard for the outlying shoals on Banco de Sofala and make for a position about 33 miles ESE of Ponta Macuti Light. Then, according to the chart, with a good fix, vessels should steer 292° for Ponta Macuti Light. A least depth of 9.7m is charted near this track in position 20° 00'S., 35° 15'E. Caution is advised during periods of heavy swell. Approach should be made after half flood tide. Instructions should be obtained from the pilot boat before proceeding to the Waiting Anchorage in the vicinity of Approach Lighted Buoy A.

Caution.—Depths throughout the entrance channel are liable to change and buoys may be moved accordingly. Depths of up to 1.8m less than charted have been reported (1994) in the entrance.

Beira to Porto de Quelimane

3.11 From Beria, the coast trends in a NE direction to the delta of the Rio Zambezi.

From **Savane** (19° 39'S., 35° 08'E.), the coast is backed by a line of low sandhills.

From the Rio Mauendeni to the Rio Luaua, the coast is lower and numerous small rivers enter the sea.

Kirk Point (18° 58'S., 35° 57'E.), a low point, is the W entrance point of the Rio Luaua and Ord Point, the E entrance point 2 miles NE, is thickly wooded and has a range of hummocks near its E bank.

The Rio Luaua does not join the delta of the Rio Zambezi, although it flows within 3 miles of it.

The Rio Zambezi, after a course of more than 1,200 miles, enters the sea through an extensive delta, about 37 miles wide, between the mouths of the Rio Milambe (18° 55'S., 36° 04'E.) and the Rio Chinde (18° 34'S., 36° 29'E.). Several rivers flow through the extensive delta; the Rio Chinde, although one of the narrowest and most tortuous, is the deepest and the one now used.

Depths—Limitations.—The various bars should never be attempted without the assistance of a pilot or previously examining them. The fluctuations in the depth of the river are considerable, therefore, there is no permanence in either the direction or depths of the navigable passages.

Aspect.—The land separating the various entrances is low, the tops of the trees nowhere exceeding from 15 to 24m in height, and the similarity of the appearance of different mouths renders it somewhat difficult to distinguish any particular one. The Rio Cuama, the widest entrance, lying between Ponta Leste (18° 53'S., 36° 17'E.) and Ponta Cause, about 1.5 miles ENE, two comparatively high and densely wooded points, is perhaps the most easily distinguished on account of its width, the other entrances being mostly narrow.

The large body of water running out of the various mouths during the rainy season, combined with the continuous heavy ocean swell, so alters the positions of the several bars, causing islands to form and to be washed away, that the entrances are never alike for two seasons.

Barra Inhamissengo (18° 54'S., 36° 08'E.) lies across the mouth of the Rio Mucelo, about 3.5 miles ENE of the Rio Milambe; at springs the outgoing tidal currents run across the bar at rates from 4 to 4.5 knots.

Anchorage.—Anchorage can be taken off Barra Inhamissengo in 8m, sand, but in fine weather vessels should lie farther out. The current generally sets W, causing vessels at anchor to lie broadside to the usual SE wind; in this condition considerable roll will be experienced.

The Rio Pambane enters the sea about 6.5 miles N of Ilha Timbue Light (18° 49'S., 36° 21'E.). Anchorage can be taken in 7m, mud about 3 miles E of the river mouth.

3.12 Vila do Chinde (Porto do Chinde)(18° 32'S., 36° 30'E.) ([World Port Index No. 46900](#)) is the port for the Rio Zambezi, and is located at the mouth of the Rio Chinde. The port consists of a town and a small natural harbor. The spring tides rise 3.8m and the neaps rise 2.6m. Spring currents run at rates from 2.5 to 3.5 knots, respectively, on the incoming and outgoing flow. During neaps there is no perceptible incoming current.

The entrance is fronted by numerous sandbanks which extend seaward about 2.5 miles, and the inner part of which dry from 2.4 to 3m. The sea breaks heavily on these banks. There is a bar across the entrance, lying near the outer edge of the drying banks, and, as changes in the position of, and depths in the channel across the bay are frequent, vessels should not attempt to enter without a pilot.

Pilotage.—Pilotage is compulsory, and pilots must be obtained from Beira or Porto de Quelimane. Local pilots for the river are both numerous and skillful, and vessels should await the pilot near the fairway buoy.

Vessels may anchor outside the fairway buoy in 7 to 9m about 4 miles ESE of Ponta Liberal, but the anchorage is not recommended because of its being open to the prevailing S winds. Good anchorage may be obtained in the river a little more than 1 mile NW of Ponta Liberal in from 4.6 to 7.3m, good holding ground; vessels should moor. Strong E winds render anchorage close within Ponta Liberal untenable for small vessels, but at such times they can obtain anchorage farther W. Vessels are allotted anchorage berths by the Captain

of the Port. A mooring buoy, allocated to the Captain of the Port, lies in the inner part of the port on the N side of the harbor; anchorage is prohibited in the vicinity of this buoy.

3.13 Between **Ponta Liberal** (18° 34'S., 36° 28'E.) and the Rio Bazar the coast is low and seldom visible at a distant of 7 miles offshore, but between the Rio Bazar and Ponta Deia, 15 miles farther NE, it is slightly higher and more visible.

The **Rio Linde** (18° 12'S., 36° 50'E.) is entered between Ponta Deia and Ponta Sampinguira. A white triangular beacon stands on Ponta Sampinguira. Anchorage can be taken in 7m SE of Ponta Deia.

Between the Rio Linde and **Ponta Olinda** (18° 03'S., 36° 58'E.) the coast is low and covered with vegetation; there are several sandhills and reddish patches. A low, but prominent, bluff is situated 2.5 miles NE of Ponta Sampinguira.

Vilhena Light (18° 06'S., 36° 55'E.) is exhibited 3.7 miles SSW of Ponta Olinda, the S entrance point to the Rio dos Bons Sinais.

Caution.—Between Vila do Chinde and the Rio dos Bons Sinais shallow water may be expected off the entrances of the rivers, and, as the soundings are few, it is not advisable to close the coast too much when navigating it.

3.14 The Rio dos Bons Sinais is entered between **Ponta Olinda** (18° 03'S., 36° 58'E.) and Ponta Tangalane. The land near Ponta Olinda is somewhat higher than the low, sandy, jungle covered land on both sides of the entrance.

The bar across the entrance extends from the vicinity of Vilhena light to a bank extending SSE from Ponta Tangalane. In 1975 there was a depth of 3.3m on the bar at LW springs. However, the bar and banks are subject constant change, especially the bar after SW gales, and no reliance should be placed on the charted depths.

The sea is generally smooth on the bar at HW but is said to be impassable if the sea is running in the offing. At times, particularly at the ebb, solitary waves of great height break on the bar; boats should use great caution in crossing.

Vessels drawing up to 5m may cross the bar at HW springs, and up to 3.5m at HW neaps.

Pilotage.—Pilotage is compulsory for all vessels entering the Rio dos Bons Sinais. Pilots are available at all hours and with prior arrangement will meet vessels at the landfall buoy, about 3.5 miles SE of Vilhena Light.

Porto de Quelimane (17° 53'S., 36° 53'E.)

[World Port Index No. 46910](#)

3.15 Porto de Quelimane is located on the N edge of the Zambezi Delta, about 18 miles up the the Rio dos Bons Sinais. The port consists of a town and a very small natural harbor.

Winds—Weather.—The prevailing wind off the river is from SE to S during the greater part of the year, being sometimes to the W of S between January and March. In October, winds from SSE to ESE have been found to blow throughout the night, lulling in the morning, but this is unusual, as a land wind generally springs up at night. Off the town in

July, the sea breeze from SSE sets in about noon, with a force of from 1 to 3, but during the night it is usually calm, with the land breeze in the morning.

The worst weather conditions occur in January and February at the height of the rainy season followed by the months when the rains have ceased and the sun is actively drying up the decaying vegetation; November is the hottest month. Early morning mists can be relatively cold with a temperature of 17° C being registered in July.

Tides—Currents.—Outside the bar and along the coast the current generally sets to the SW, at velocities of from 1 to 2 knots, causing vessels at anchor off the bar to lie broadside to the swell and to roll considerably.

The incoming tidal current, after running over the bar when nearing Ponta Tangalane, sets directly onto the banks on the W side, rendering great caution necessary. In the river, the currents attain a velocity of 3 knots.

Depths—Limitations.—The permissible draft for entry are subject to Port Authority and to the depth over the bar. The port accommodates vessels up to 150m and a draft of 5m.

A concrete wharf with a depth of 6m alongside, is situated in the NW part of the port area.

Aspect.—The land on both sides of the entrance is low, sandy, and covered with trees or jungle growth. The entrance is conspicuous bearing about 328° and, when abreast of it, the river, being wide and having a straight course for some distance, no land will be seen from the deck between the entrance points, although Ilha dos Cavallos Marinhos, 4 miles within the entrance may be seen.

Two radio masts, about 61m high, stand on the NE side of the town and are visible when the light is favorable. The barracks situated in the SE part of town are prominent. The church is a stone building painted yellow and has two spires.

Pilotage.—Pilotage is compulsory and is available during daylight hours only. Pilots board close E of Buoy P.

Regulations.—Vessels may enter and depart the port only at HW during the port working hours of 0700-2300.

The vessel's ETA should be sent 7 days prior to arrival, stating the deepest arrival draft and vessel's last port of call. Further ETAs should be sent 72, 48, 24, and 12 hours in advance, giving the date, time of arrival and any draft changes.

Anchorage.—Good temporary anchorage can be obtained outside the entrance in 9m with Vilhena Light bearing 286°, distant about 5 miles, but if intending to remain for any time, it would be better to anchor farther NE in about the same depth, as here there is said to be less sea and current.

Anchorage, in 9 to 11m, is obtainable N of the E entrance of Canal Militao. There is also anchorage off the town of Quelimane in 3 to 6m. Vessels can also anchor in almost any part of the river and are designated by the pilot.

Caution.—The positions of the range beacons and buoys are subject to alterations to meet the frequent changes in the channel. It has been reported (1996) that the entrance channel and the approaches to the wharf have silted up.

Porto de Quelimane to Porto de Pebane

3.16 Between Ponta Tangalane (18° 01'S., 36° 59'E.) and Ponta Matirre, the coast is low, sandy, and backed by jungle. Several rivers flow into the sea along this stretch of coast.

There are dangers along the coast but in general the offshore depths increase regularly and gradually.

Caution.—Pantaloon Shoals (17° 43'S., 38° 02'E.) lie about 22.5 miles offshore and extend 8.5 miles in a NE and SW direction. The SW shoal has a least charted depth of 7.8m while the NE shoal has a depth of 8.3m.

Acorn Patch has a depth of 7.7m.

David Shoals (17° 30'S., 38° 27'E.) consists of three patches which have a least depth of 9.8m. Lacerda Shoal, with a depth of 8.2m, lies about 4.5 miles NE of David Shoals.

Porto Belo (17° 42'S., 37° 11'E.)

World Port Index No. 46920

3.17 Porto Belo is situated 4 miles within the entrance of the Rio Macuse on the N bank. The Rio Macuse is entered between Ponta Namerruma and Ponta da Barra, a slight bluff 2 miles farther NE.

Tides—Currents.—The incoming current sets W on the rising tide, and the outgoing current sets E on the falling tide. Caution is necessary to guard against these currents when crossing the bar.

Depths—Limitations.—The bar is subject to frequent changes. Within the bar, the depths increase and at the anchorage abreast a wharf near Porto Belo there are depths of 11.6m. A depth of 9.4m can be carried as far as Maquival, about 16 miles within the entrance.

The maximum draft allowed over the bar is 5m at springs and 3.5m at neaps.

Aspect.—The navigational marks are moved as necessary to meet changes in the channel.

Pilotage.—Pilotage is compulsory. Pilots must be requested through the Port Authority at Quelimane 24 hours before arrival.

Vessels should not attempt to enter without a pilot.

Anchorage.—Anchorage can be obtained in the river abreast a wharf near Porto Belo.

Caution.—The navigational marks are moved as necessary to meet the frequent changes in the channel.

From Ponta da Barra the coast trends in an ENE direction to **Ponta Matirre** (17° 17'S., 38° 11'E.). The 10m curve lies up to 6.5 miles off this part of the coast.

The **Rio Mazemba** (17° 19'S., 38° 03'E.) is the most important of the rivers along this stretch of coast, excluding the Rio Moniga. The river flows out through a narrow channel. Within the bar there are depths from 6 to 9m for about 4 miles.

Porto de Pebane (17° 16'S., 38° 09'E.)

World Port Index No. 46925

3.18 The estuary of the Rio Moniga, known as Porto de Pebane, enters the sea 5 miles ENE of the Rio Mazemba. Ilha Quisungu separates the entrances of the Rio Mazemba and the Rio Tejungo.

Depths—Limitations.—The entrance is fronted by extensive banks, and shallow water extends a considerable distance; 3.5 miles off, the depths on the range line are about 9.1m. The bar lies between banks extending seaward from the

entrance points, about 2.5 miles; the depths over the bar change frequently. In 1974, the least depth in the entrance was 1.7m.

Within the bar, the depths increase from 4.9 to 6.1m and in the river there are depths from 10 to 17m.

Extra caution should be exercised when crossing the bar

Aspect.—The S coast of Ilha Quisungu is irregular and somewhat higher than the coast on either side. This feature, together with the bold appearance of Ponta Matirre, renders the entrance to Porto de Pebane easy to distinguish from that of the Rio Mazemba.

A military station on the W bank of the Rio Moniga, above the entrance of the Rio Tejungo, may be easily identified.

Range beacons stand on the W bank of the river about 3 miles within the river in range 327°. In 1992, the landfall buoy was moored 2 miles SSE of Ponta Maverani; the channel across the bar is marked by buoys. Aids to navigation are moved as necessary.

Pilotage.—Pilotage is compulsory. Pilots must be requested through the Port Captain at Quelimane at least 1 day before arrival.

Anchorage.—There is anchorage off the town in 12m, sand and shells.

Caution.—Vessels should not attempt to cross the bar or enter without local knowledge.

Aids to navigation are moved as necessary.

Porto de Pebane to Ponta Calderia

3.19 Ponta Matirre (17° 17'S., 38° 11'E.), marked by a light, is a conspicuous bluff composed of yellow cliffs. A signal station is located on the point.

The Rio Melai is entered about 6 miles ENE of Ponta Matirre. Cabo Tocco, the NE entrance point, is a conspicuous bluff, formed of red earth cliffs.

Ponta Matirre and Cabo Tocco are the most conspicuous points on this section of the coast.

Between Cabo Tocco and Ponta M'sulo, 26 miles ENE, there is a well-wooded stretch of coast.

The **Rio Namane** (17° 08'S., 38° 31'E.), which enters the sea 19 miles ENE of the mouth of the Rio Melai, is the mouth of the delta of the Rio Malela. In 1958 there was a depth of 1.2m on the bar across its entrance.

The tidal current attains rates from 4 to 5 knots in the entrance during springs. The sea over the bar is reported to be smoother during the period of the incoming tidal current, but no vessel should attempt to cross the bar without local knowledge.

3.20 The **Rio Moebaze** (17° 05'S., 38° 41'E.) (World Port Index No. 46926) is entered between Ponta M'sulo and Ponta Almandia, about 1 mile ESE. The tidal currents in the entrance are at times violent and run in various directions, especially at spring tides with strong W winds. The depths across the bar are subject to frequent changes; in 1958 the depth was 1.5m. Because of the shifting bar all aids to navigation are moved whenever necessary. Pilotage is compulsory and the latest information should be obtained from the Port Captains Office at Quelimane. Vessels should not attempt to cross the bar without local knowledge. Anchorage may be obtained abreast the old village of Moebaze, in 5 to 8m.

Ilhas Primeiras is a group of islets lying in a position 13 miles SSE of Ponta M'sulo and extending NE, roughly parallel to the coast, for a distance of 25 miles.

Ilha Fogo (Ilha do Fogo) (17° 14'S., 38° 53'E.) is 3m high with a few trees on its N end, the other parts being covered with shrub. Anchorage may be obtained, in 9 to 10m, 0.5 mile from the beach on the W side, or a vessel may anchor in 18m about 0.3 or 0.4 mile from the beach, with the center of the island bearing 156° to 178°.

Ilha Coroa lies NE of Ilha Fogo. A stranded wreck lies on Ilha Coroa and a depth of 10.9m is located 1 mile N of the N extremity of the island.

Ilha Casuarina is covered with casuarina trees, about 24m high, and can be recognized at a considerable distance.

Ilha Epidendron has a few casuarina trees on its N part, but the S part is covered with short shrub; it may be seen from a distance of about 15 miles. Anchorage can be obtained in 7 to 20m about 0.3 mile off the NW side of the island. A stranded wreck lies on Ilha Epidendron.

Casuarina Road, between the island of the same name and the mainland, is the best anchorage along this coast. Anchorage, protected from SE winds, may be obtained in 20m, about 1 mile from the W side of Ilha Casuarina, or in 6m, about 0.5 mile offshore with the center of the island bearing 135°. If entering from the N, Ilha Casuarina should be kept on a bearing of 220° and open W of Ilha de Epidendron in order to pass NW of Baixo Barrco and the reef E of it; then course should be altered to approximately 232° on Ilha Fogo for the anchorage.

Baixo Barraco, a dangerous reef, lies 3 miles NE of Ilha Epidendron.

3.21 From **Ponta Almandia** (17° 05'S., 38° 42'E.), the E entrance point to the Rio Moebaze, the coast trends ENE to Ponta Macalonga. For a distance of 6.5 miles E of Ponta Almandia the coast is well wooded, then its aspect gradually changes to sandy hummocks covered with thick clumps of bushes. Farther E, the coast consists of low, bare, sandhills with a few scattered trees.

Two rivers flow into the sea along this coast, but the mouth of each river is closed by a bar, which nearly dries.

A distinct red cliff is located 13 miles E of Ponta Almandia.

Ponta Macalonga (17° 01'S., 39° 04'E.) is a low sandy point. It is fronted by a bank, with irregular depths that range from 5.5 to 9m. The bank extends 4 miles S of the point.

Mount M'tupe (16° 34'S., 39° 10'E.), about 27 miles N of Ponta Macalonga and the only mountain seen on this part of the coast, is a conspicuous cone of considerable height. A conspicuous clump of casuarina trees stands about 7 miles N of Ponta Macalonga. The Rio Naburi enters the sea 5.5 miles NE of Ponta Macalonga and the Rio Lingonha enters the sea 2.5 miles farther NNE. These two rivers have no particular importance.

3.22 Porto de Moma (16° 46'S., 39° 14'E.) ([World Port Index No. 46927](#)) is entered between Ilha Mutirane (16° 47'S., 39° 15'E.) and Ponta Nicota, the N entrance point. Banks extend nearly 2 miles E of each entrance point. In 1983 there was a depth of 1m in the channel over the bar joining the above banks.

Tidal currents run strongly in the entrance channel and are reported to be irregular.

Pilotage is compulsory. The maritime delegate at Porto de Angoche is the pilot. Anchorage may be obtained abreast the village of Nacalaua, 2.5 miles within the entrance, in 7 to 9m.

Ponta Calderia (16° 39'S., 39° 30'E.) is somewhat higher than the adjoining coast; it is marked by a light.

Off-lying Islets and Dangers

3.23 Ilhas de Angoche are a chain of islets and shoals which lie at distances that vary from 3.5 to 8 miles offshore, near the outer edge of a bank fronting the coast between Porto de Moma and Porto de Angoche 50 miles NE.

Ilha Moma (16° 49'S., 39° 31'E.) is the farthest SW of the group. Except on its NW side, the islet is surrounded by reefs which extend up to 1 mile off its E side.

There are two isolated rocky patches situated 6 and 7.5 miles SW of Ilha de Moma; they have depths of 5.4m and 6m, respectively. Other isolated patches lie NW of Ilha Moma; their positions are best seen on the chart.

Ilha Caldeira (16° 39'S., 39° 43'E.) lies about 12 miles E of Ponta Caldeira. Reefs extend E from the islet for a distance of 1 mile. Moderately good anchorage may be taken 1 mile NW of the islet in depths of about 14m, coral, sand, and mud.

Ilha Nejovo, a low sandy islet covered with trees, lies about 6.7 miles NE of Ilha Caldeira. An extensive reef lies off the SE side island. There is anchorage about 0.2 mile off the NW side of the islet in depths of 11 to 14m; it is protected from S and SE winds.

Ilha Puga-Puga lies 3.2 miles offshore about 5 miles NE of Baixo Miguel; at HW it only shows as a small sandy cay about 1.8 to 2.4m above the sea. Except on its NW side, the islet is surrounded by reefs which extend as much as 1.5 miles SE.

Ilhade Mafamebe (16° 21'S., 40° 02'E.) is low and sandy, but a group of trees on it may be seen from a distance of 12 to 15 miles; it is also marked by a light.

Anchorage.—Anchorage may be taken SE of the above shoal, in 11m, with Ilha de Mafamede light bearing 180°, distant 1 mile, or with the light bearing 150°, distant 0.4 mile, in a similar depth.

Caution.—Between Ilha Moma and Ilha Calderia, 15 miles NE, the depths are quite irregular.

Baixo Miguel (16° 31'S., 39° 53'E.) is a dangerous drying reef which should be given a wide berth.

A shoal, with a least depth of 5.8m, lies 2 miles NW of the light situated on Ilha de Mafamede.

Ponta Masiuane to Porto de Mocambique

3.24 Ponta Masiuane (16° 24'S., 39° 54'E.) is a low, projecting, white, sandy point, on which are a number of small sand hillocks, conspicuous from a considerable distance.

The Rio Quilua, W of Ponta Masiuane, is much frequented by coasting vessels, which find good sheltered anchorage off Menuca, a village within the mouth. The entrance channel, between two sandbanks which are well-defined at low water, when there is no difficulty in entering. The least depth in the channel over the bar was 0.9m (1960).

3.25 Porto de Angoche (16° 14'S., 39° 54'E.) ([World Port Index No. 46928](#)), consisting of a town and a small natural harbor, is entered between the E extremity of Ilha do Buzio (16° 16'S., 39° 56'E.) and Ponta Namacoto, a slight projection on the coast, nearly 4 miles NE. The tidal currents attain a maximum velocity of 4 knots in the anchorage. There are numerous banks and shoals in the approach. The entrance channel is about 11 miles long and the depth over bar was 2m in 1974. The port will accommodate vessels, with a draft of 5m but vessels of this size can enter and leave only at HW.

About 1 mile outside the bar there are some comparatively shallow spots for which a look out should be kept. These shoals are usually marked by breakers and can be avoided.

Pilotage.—Pilotage is compulsory for merchant vessels entering and, if requested, will embark off Ilha de Mafamede. Anchorage can be obtained opposite the town, in a depth of 7.5m, sand and mud.

Caution.—Caution is required if it should be considered necessary to sound the bar, as it is sometimes dangerous to do so.

3.26 Between **Ilha Angoche** (16° 20'S., 39° 51'E.), at the entrance to Porto de Angoche, and the Rio Sangage the coast consists of sandhills, which attain heights of from 91 to 122m near the river. Several of these hills are marked by patches of red sand. The land in the vicinity of the Rio Sangage is conspicuous, as the sandhills, partly covered with vegetation, and the N point of the river, which is low and sandy, form a striking contrast to two rocky points 4 or 5 miles S of the river.

Ponta Congolone (16° 05'S., 40° 06'E.), a rocky point NE of Ponta Namacoto, may be identified by a conspicuous yellow sand dune situated on it. Close within the point the land rises to a height of 311m. This point is visible at 15 to 20 miles offshore and, except for the hill on which Sangage Light stands, is the only land visible.

Caution.—**Baixo de Santo Antonio** (16° 12'S., 40° 08'E.), a steep-to dangerous reef which dries in places, lies in the approach to Porto de Angoche.

Baixo Namuali lies near the S end of a sand spit which extends 5 miles SSE from Ponta Congolone. There is a least charted depth of 2.7m on the shoal and the spit has a least charted depth of 5.8m.

Baixo Nantapa (16° 04'S., 40° 12'E.), a rocky patch with a depth of 7.6m, lies 6 miles E of Ponta Congolone and Baixo Sangage with a depth of 9.8m lies 5 miles farther ENE.

3.27 The **Rio Sangage** (15° 58'S., 40° 08'E.) is entered between Ponta Djuma and Ponta Selela, about 1.2 miles N.

Depths—Limitations.—Both entrance points are fronted by drying banks which extend as far as 2.5 miles E, and are connected by a bar, the position of which, and depths on, are probably subject to considerable change. In 1960, there was a least depth of 1.8m in the channel over the bar, which passed close to the bank fronting Ponta Selela, and then close to the S bank for about 3 miles within the entrance. Within the bar there are depths of from 3 to 7.9m in the narrow channel, which trends in a S direction to the settlement.

Aspect.—Namduma Hills rise from 610 to 914m, about 17 miles NNW of the entrance of the Rio Sangage, and should be conspicuous features from seaward.

Anchorage.—Anchorage can be obtained off the settlement, about 3 miles within the entrance on the S shore, in 5 to 7m.

Caution.—Local knowledge is essential for crossing the bar.

3.28 Between the Rio Sangage and the Rio Murrioze, the low coast is partly covered with trees and is fringed by a sandy beach.

The **Rio Murrioze** (15° 51'S., 40° 14'E.) has a narrow entrance; it may be identified by a small bluff on the S bank of the river and by the village of Quinga which is situated near the N entrance point.

Baixo Mussibarinde (15° 56'S., 40° 18'E.), with a least depth of 6.4m, and Baxio Quinga with a least depth of 7.9m, lie 5.5 miles and 9 miles, respectively, SE of the mouth of the Rio Murrioze. The sandy beach continues for a distance of 10 miles NE from the Rio Murrioze and is then fringed with rocks as far as Ponta Namalungo, 7.5 miles NE.

Ponta Namalungo (15° 38'S., 40° 25'E.) is a wooded sandy bluff marked by a light. The adjacent coast is low and sandy, with a growth of casuarina trees; the distant land behind the point appears high.

Baixo Mecade (15° 50'S., 40° 23'E.), with a least depth of 2.3m, lies 5 miles offshore 9 miles ENE of Quinga. A shoal area, with depths under 10m, lies 3 miles NNW of Baixo Mecade and Baixo Namaete, a reef area, with a least charted depth of 4.9m, lies 7 miles NNE of Mecade.

3.29 From Ponta Namalungo to Ponta Bajone the coast is fronted by a mangrove swamp; a chain of islands, islets, and sandbanks lies along the edge of this swamp.

Within 4 miles of the chain of islets, the offshore depths are irregular and the bottom is rocky; there are several dangerous shoals. The sea generally breaks heavily on some of these shoals.

Baixo Mucalanga (15° 35'S., 40° 32'E.), with a least depth of 1.8m, and Baixo Chataputa, with a least depth of 0.6m, are two rocky patches near the edge of a 10m bank, which extends 2 miles off the chain of islets 8 miles NE of Ponta Namalungo; the sea generally breaks on the shoals.

Baixo Infusse (15° 32'S., 40° 37'E.), a rocky shoal with a least depth of 4.6m, lies 4 miles offshore. Baixo do Brugi consists of several shoal patches, which have a least depth of 2.7m. An isolated pinnacle rock, with a depth of 3.8m, lies near the 10m curve 2 miles NNE of the shoalest part of Baixo do Brugi.

Baixo Namezaco (15° 22'S., 40° 39'E.), a sandy patch which dries, breaks heavily; it lies at the seaward end of a spit, about 2 miles offshore. Baixos Quanzi consists of several detached shoal patches, with a least depth of 4m. The sea generally breaks on these shoals.

Ponta Bajone (15° 15'S., 40° 41'E.) is the E extremity of a low, sandy island covered with trees, which lies at the NE end of the coastal mangrove swamp.

3.30 Porto de Mocambo (15° 08'S., 40° 33'E.) is entered between Ponta Quissiruaonde and Ponta Fugo.

Aspect.—Muchelia, a hill with three peaks rising about 1.5 miles NW of Ponta Fugo, is the most conspicuous landmark.

Anchorage.—Anchorage may be obtained about 0.3 mile off the N shore, in from 11 to 15m with Ponta Fugo bearing 120°, distant about 1.5 miles, or about 0.5 mile off the S shore,

in 18m, with the drying extremity of Ponta Calajulo bearing 031°, distant about 2 miles, but anchorage may be obtained in any part of the harbor which is clear of dangers.

Directions.—Vessels should approach the entrance steering for Muchelia, bearing 270°, and when a prominent white building at Lunga bears about 243°, it should be steered for on that bearing, passing about 0.2 mile off Ponta Fugo, which is steep-to, whence course may be shaped for the selected anchorage. Care must be taken to avoid Quipua which lies 1.7 miles WNW of Ponta Fugo.

Porto de Mocambique (15° 02'S., 40° 44'E.)

World Port Index No. 46930

3.31 Porto de Mocambique is entered between Ponta Sancul (15° 05'S., 40° 43'E.) and Ponta da Cabaceira, a low wooded bluff. Ilha de Mocambique is the site of the town of Mocambique, which nearly covers the entire island. Although parts of the harbor are encumbered with banks and shoals there is shelter within the island for a large number of vessels.

Winds—Weather.—The prevailing winds on the coast about Mocambique are N from October to April and S during the rest of the year. Land and sea breezes prevail, the former blowing directly out of the harbor at daylight and the latter coming in about 1000 or 1100 from SE to S, shifting toward E in the afternoon.

Cyclones are rarely actually experienced within the harbor, but they once occurred in three consecutive years during the month of January. Cyclones frequently pass through Mozambique Channel within a few miles of the harbor.

The rainy season is from November to March, inclusive.

Tides—Currents.—A current setting SW along the coast is usually experienced off Porto de Mocambique; it reaches a velocity of 4 knots during the strength of the Northeast Monsoon. The outer limits of the current are from 50 to 80 miles offshore.

The mean drift of the Mozambique Current between latitudes 10° S and 20° S is weakest in June and July when they are 8 and 7 miles per day, respectively. At this time, within the port area, the current may be inappreciable, but close inshore a countercurrent may be experienced.

The incoming tidal current sets W on the rising tide, and the outgoing tidal current sets E on the falling tide; both incoming and outgoing tidal currents are very strong at springs.

Depths—Limitations.—The charted depth on the range line through North Channel is 9.1m, located about 0.8 mile NE of the NE extremity of Ilha de Goa. There are depths up to 33m within the harbor. Only vessels with a draft less than 9.1m can cross the bar at LW.

Aspect.—For about 10 miles on either side of the harbor the land is low, but Cabo Conducia, about 6 miles N of Ilha de Mocambique, may be identified by its cliffs, 61m high, with reddish colored patches, which stand out clearly from the surrounding dark green vegetation. A conspicuous house is located about 1.2 miles SSW of Cabo Conducia.

Fortaleza de Sao Sebastiao, at the NE extremity of Ilha de Mocambique; the white spire of Sao Paulo Church, about 0.4 mile SW; and the lighthouse on Ilha de Goa, about 3 miles SE of Ilha de Mocambique, are conspicuous.

In clear weather, the harbor may be identified by Monte Pao (14° 50'S., 40° 25'E.) and Monte Mesa (14° 45'S., 40° 39'E.), both about 296m high, rising about 23 miles NW and 18 miles N, respectively, of Ilha de Mocambique. The former, which is not often visible from seaward, resembles a small, round-topped hill, surmounting a larger one; the latter has a long, flat summit, which rises from a longer flat topped ridge, but, at some distance from it, only its upper part is visible, and it appears as a flat island. A bridge extends from the mainland ESE to the SW end of Ilha de Mocambique.

Pilotage.—Pilotage is compulsory for merchant vessels; they embark at the seaward end of North Channel. A pilot is available at all times. The vessel's ETA should be given to the pilot station as soon as possible.

Anchorage.—Vessels waiting to embark a pilot or by reason of draft unable to cross the bar may anchor 1.5 miles NE of Ilha de Goa, in depths of 1 to 18m, sand and coral.

There is anchorage, in 12 to 14m, with Fortaleza Sao Sebastiao bearing between 282° and 305°, 0.6 to 0.8 mile distant. This anchorage has not been closely examined and several deep holes exist; care is necessary when anchoring.

Inside the entrance there are three principal anchorages, as follows:

1. Vessels of 5.5m draft can anchor, in 6 to 8m, between Ilha de Mocambique and Banco Leven.
2. Deep draft vessels can anchor, in 22 to 24m, between Banco Leven and Harpsell Sands.
3. There are depths of 9.7 to 12.8m NE of Lumbo Pier, where vessels anchor when discharging for the railroad.

Caution.—Because of the danger of fouling telegraph cables, vessels should not anchor in the channel NE of Ilha de Mocambique or within a radius of 0.6 mile of the N end of Fortaleza Sao Sebastiao.

Porto de Mocambique to Porto de Nacala

3.32 Baía da Conducia is entered between **Cabo da Cabaceira** (15° 00'S., 40° 46'E.) and Ponta Quifinga.

Depths—Limitations.—The depths in the entrance are irregular, but near the middle of the bay there are depths of from 11 to 22m, the approach being through a channel, about 0.3 mile wide, with depths of from 20.1 to 33m. Westward the depths decrease; there is a least depth of 5.8m near the entrance of the Rio Sanhute, at the head of the bay.

Aspect.—Between Cabo da Cabaceira and the conspicuous cliffs of Cabo Conducia, about 4 miles NNW, the coast is low, sandy, and covered with trees. Ponta Quifinga is the S extremity of Ilha Quitangonha, a narrow coral island, about 6.1m high, with steep and overhanging extremities, which is covered with grass and shrubs and ringed with mangroves on its W side.

Anchorage.—Anchorage may be obtained, in depths from 11 to 16m, mud, with Ponta Quifinga in range with the N end of Ilha Sombreiro bearing 072°, from 2.5 to 4.5 miles distant from the islet. Cabo da Cabaceira in range with Cabo Conducia, bearing about 150°, gives a mark for the outer anchorage, and a mark for the inner anchorage is given by the N extremity of Ilha dos Sete Paus in range with Cabo Conducia bearing about 125°.

Vessels of moderate draft may obtain anchorage in the Rio Sanhute, in depths from 6 to 14m, in a narrow area about 1 mile above the entrance; there is a bar across the entrance with a least depth of 3.7m.

Directions.—Vessels approaching from the S pass at least 0.5 mile off Ilha dos Sete Paus and steer for a position with the N extremity of that island bearing 218° 0.8 mile distant. From here make good a course of 320° for a position 1.5 miles S of Ilha Sombriero, then a course of 286° will lead to the anchorage.

From N, keep 2 miles off Ilha Quitangonha (14° 52'S., 40° 49'E.), then make good a course of 255° for the position 1.5 miles S of Ilha Sombriero, then proceed as above.

3.33 Between Ilha Quintangonha and Porto de Quissimajulo several coves are available to small coastal vessels.

Between **Ponta Napenja** (14° 50'S., 40° 50'E.), which projects from the coast, and Ilha Ancuazi, 18 miles N, the coast is backed by hills lying about 2 miles inland.

Along the coast, for a distance of 3 miles N of Ponta Napenja, it is fringed with a series of rocks, with holes in them resembling arches.

Ponta Onlugune (14° 41'S., 40° 50'E.) is marked by a light. Enseada de Janga is situated between 2 and 5 miles N of Ponta Onlugune; in the N part of the bay there are depths of more than 365m within 0.5 mile of the coast.

Between **Ponta Cumpadji** (14° 31'S., 40° 50'E.) and Cabo Melamo the coast is about 90m high; it is fronted by a drying reef of rocks and coral, which extends up to 1 mile offshore.

Baía de Fernao Veloso is entered between Cabo Melamo (14° 25'S., 40° 48'E.) and Ilha Gomen. Porto de Nacala and Porto Belmore lie, respectively, in the SW and NW parts of the bay.

Ponta Gegi has a projecting rock, with a few casuarina trees on either side of it, rendering it conspicuous. An old military station, consisting of a house with a red roof, stands on the summit of a low hill, about 0.5 mile SE of Ponta Naarenque, and is visible from the entrance of the bay. A conspicuous white house stands about 1.7 miles W of Ponta Naarenque.

On the N side of the bay, the ruins of an old fort may be seen on Ilha Gomen. Between Ilha Gomen and Ponta Utuco, the E entrance point of Porto Belmore there is a moderately flat topped hill, about 91m high, which rises steeply from the surrounding level land, and when seen from about 15 miles N, resembles a vessel under sail, but, on a closer approach, or when seen on a different bearing, it loses that appearance.

At the head of the bay, about 10 miles NW of Ponta Sacamulo, the W entrance point of Porto de Nacala, are some conspicuous saddle shaped hills and a sugarloaf peak.

Anchorage may be obtained, in from 11 to 16m, on a bank which extends about 0.8 mile offshore, from 2 to 4 miles W of Ponta Gegi, but caution is necessary when anchoring on the bank, as the depths increase very rapidly off its edge.

Porto de Nacala (14° 32'S., 40° 40'E.)

World Port Index No. 46935

3.34 Porto de Nacala is a fine natural harbor entered from the SW corner of Baía de Fernao Veloso. It is situated on the SE side of the harbor, where there are quays for ocean-going vessels.

Tides—Curr ents.—The maximum tidal range is 3.7m at springs. Currents run strongly in the entrance of Porto de Nacala and also at the anchorage near the military post of Fernao Veloso; but it does not run at Baie Bengo at the S part of the port area. It was reported (1994) that the maximum current inside the harbor is 1 knot.

Depths—Limitations.—In the narrows SSW of Ponta Naarenque, the entrance is about 0.3 mile wide between the 11m curves; there is good anchorage for any size vessel. The North Quay has alongside depths of 7 to 9m. The container terminal has alongside depths of 12 to 14m.

The tankers anchorage will accommodate a vessel up to 130,000 dwt, with a maximum draft of 18m.

Aspect.—A conspicuous water tank is located about 0.5 mile SE of Ponta Maiaia; a large chimney stands about 1.7 miles N of the tank.

Pilotage.—Pilotage is compulsory. Pilots embark about 2 miles N of the light situated on Ponta Naarenque; in periods of strong winds, the pilot boards inside the bay, in the area between Ponta Naarenque and Ponta Sacamulo. It was reported (198) that vessels were permitted to proceed to the inner anchorage without a pilot. Good holding, in a depth of 24m, was reported 0.5 mile E of Ponta Namuaxi Light structure. Pilotage is compulsory for all types of vessels when berthing or shifting berth in the port.

Anchorage.—Good anchorage may be obtained anywhere, sand and mud bottom, within Porto de Nacala, but the anchorages recommended are in Baía Bengo, about 0.3 mile SSW of Ponta Maiaia, or, in 6 to 7m, 0.5 mile ESE of Ponta Miuguri. Small vessels may obtain anchorage in depths from 5 to 7m, about 0.2 mile SE of the town of Nacala-Velha. Anchorage may also be obtained in a tight close S of Ponta Naarenque, abreast the landing place for the military post, in about 22m.

Directions.—Approach should be made in the intensified sector of Nacala Light. When the light on Ponta Sacamulo bears S the vessel should head for it on that bearing until the lights S of Ponta Naarenque come in range 155°, when course should be altered to this alignment. As soon as Ponta Sacamulo is abeam, alter course to 197°; with the light off Ponta Namuaxi directly ahead to pass about 0.4 mile W of the light structure on Ponta Zuani, then steer S to the quay or the anchorage.

Porto de Nacala to Pema

3.35 **Porto Belmore** (14° 21'S., 40° 38'E.) is entered in the NW part of Baía de Fernao Veloso, between Ponta Utuco (14° 23'S., 40° 41'E.) and a projection about 1.5 miles W. It affords excellent shelter during the cyclone season.

Tides—Curr ents.—The tidal currents are strong in the entrance of Porto Belmore, and, during the rainy season, the

water is much discolored, and the edge of the reefs are then difficult to distinguish.

Aspect.—Range beacons, in line 333°, lead through the entrance and up the fairway of the port. The front beacon is a pyramid, 6.1m high, standing near the edge of a mangrove swamp at the head of the harbor. The rear beacon is a white rectangle, 7.9m high, standing on a hill about 1.3 miles NNW of the front beacon.

Anchorage.—Anchorage, in 18m depth, may be obtained off Nhiendgi, on the E side of the harbor, about 0.7 mile NW of Ponta Utuco, or, in about 12m, off the W side of the harbor, about 2.5 miles within the entrance.

3.36 Between **Ilha Gomen** (14° 19'S., 40° 44'E.) and Ponta Cogune, 7.5 miles N, the coast is covered with a line of trees all of apparently the same height. Along this area there are several small headlands with occasional patches of sand and reddish colored earth. From Ponta Cogune to Ponta Nangata, 2 miles NW, the coast consists of perpendicular cliffs 25m high; the cliff tops appear to be level.

Monte Dedo (14° 21'S., 40° 33'E.), about 10 miles W and Monte Roges (14° 14'S., 40° 26'E.), about 18 miles WNW, respectively, of Ilha Gomen, are the most distinctive landmarks in this vicinity. Monte Roges maintains much the same appearance from any direction.

Baixo do Pinda (14° 13'S., 40° 47'E.) is a coral reef fronting the coast between Ilha Gomen and Ponta Nangata; it extends about 5 miles from shore. Pinda Light is exhibited about 0.5 mile W of Ponta Cogune.



Pinda Light from N

Baía de Memba is entered between Ponta Nangata (14° 11'S., 40° 41'E.) and Ponta Lulo. Porto do Bocage and Porto de Duarte Pedroso are located in the SW part of the bay. The village of Memba is located at the head of the bay.

Anchorage.—Anchorage may be obtained, about 0.6 mile offshore, E of the village of Memba, in depths from 37 to 55m, but great caution is necessary in anchoring as the depths increase very rapidly seaward of this position.

Porto do Bocage is entered between Ponta Opopuro, about 4.5 miles WSW of Ponta Nangata, and Ponta Sahaja, about 1.5 miles W. The shape of both entrance points is most conspicuous, as they resemble the clipper bow of a vessel.

Anchorage may be obtained, in about 18m, about 2 miles within the entrance of Porto do Bocage, between a detached coral reef and the edge of a rocky bank fringing the W side of the harbor.

Caution.—Vessels without local knowledge are advised to enter Porto do Bocage at low water.

3.37 Porto de Duarte Pedroso (14° 13'S., 40° 33'E.), at the SW corner of Baía de Memba, is entered between Ponta Nuaeia, about 1.2 miles WSW of Ponta Mecontene, and Ponta Oxelo, about 0.7 mile farther WSW.

Sheltered anchorage may be obtained by small vessels in either inlets, in depths from 7 to 16m, mud, good holding ground. Vessels are recommended to await LW before entering.

Between **Ponta Lulo** (14° 09'S., 40° 36'E.) and Ponta Serissathe, the aspect of the land is more striking than on other parts of the coast, being low near the sea and increasing to mostly level land about 61m high a short distance within. The Sorisa Range, several craggy peaks having the appearance of the ruins of some great city, rise abruptly from the level land to heights from 610 to 914m, with the peaks assuming every variety of form of sugarloaf, cone, and round or square-topped pillars, and in some cases seeming to overhang their bases. Monte Pilar (13° 44'S., 40° 19'E.), the highest and most conspicuous of them, is a cone with a pyramidal point, always appearing the same from all bearings.

Northward of Baía do Lurio the land is of moderate height and continues so from Ponta Uifundo to Ponta Maunhane.

Ponta Mancome (14° 07'S., 40° 37'E.) is the S entrance point to Angra do Semedo, whose shores are fronted by drying rocky banks; Ilheu Tebo, 2.5 miles NNE of Ponta Mancome, is the N entrance point of the bay. The point just N of Ilheu Tebo is a steep projection of reddish colored rock 33m high; its prominence is enhanced by the trees on its summit.

3.38 Porto Simuco is entered between **Ponta Miasi** (14° 00'S., 40° 37'E.) and Ponta Quissiquitxi, about 1 mile N. Ilheu Quissindja lies in the S part of the harbor, about 1.2 miles W of Ponta Miasi.

Aspect.—Ponta Miasi is known for a military station on rising ground, while Ponta Quissiquitxi is a rock, appearing as a vessel's stern, which stands out conspicuously from the low land.

Anchorage.—Anchorage, in depths from 10 to 17m, may be obtained in an extensive area in the middle of the harbor.

Monte Sofia, a hill 43m high, rising close within the coast, about 6 miles N of Ponta Quissiquitxi, has some red patches on its N side which make it moderately conspicuous.

Baía Alemeida is entered between **Ponta Maria Luiza** (13° 43'S., 40° 34'E.) and Ponta Serissa. About 2 miles NW of Ponta Maria Luiza is the mouth of the Rio Missangage. South of the river there is a conspicuous bluff, and N of it stands the military station of Chaonde.

Anchorage.—Anchorage may be obtained in the S part of Baía Alemeida, in about 14m, sand, about 1 mile offshore, with Chaonde Light bearing about 206°.

Anchorage, sheltered at low water from N and NE winds, may be obtained in the N part of the bay, in 12m, about 1 mile from the NW shore, but it is exposed to S winds.

3.39 Ponta Metacaua (13° 33'S., 40° 36'E.) is the N extremity of a low peninsula separating Baía Alemeida from Baía do Lurio.

Baía do Lurio is entered between Ponta Metacaua and Ponta Uifundo, about 10 miles N. During the South Monsoon, sheltered anchorage may be obtained in the S part of the bay, but it is exposed to N winds. Restinga Mancabale projects about 1.5 miles N from Ponta Metacaua.

Close within Ponta Metacaua, there is a conspicuous clump of trees, which, when seen against the higher land in the background, resembles an island. About 5 miles NW of Ponta Metacaua is the entrance of the Rio Lurio; the discharge at times discolors the sea for some miles offshore. On slightly rising ground on the N bank of the river are some whitewashed houses which are conspicuous from seaward.

Anchorage.—Anchorage may be obtained, in about 12.8m, SE of the mouth of the Rio Lurio, about 1.3 miles offshore, and about 1 mile from the W edge of the N port of Restinga Mancabale.

Caution.—Vessels from S should approach Baía do Lurio, with the military station on the S bank of the Rio Lurio bearing less than 270°, in order to avoid the N extremity of Restinga Mancabale.

Between **Ponta Uifundo** (13° 23'S., 40° 36'E.) and Ponta Maunhane, the coast is fairly high, and is fringed with a sandy beach and fronted by a coral reef. North of Ponta Mesaolane, situated 15 miles N of Ponta Uifundo, the reef dries and extends 1.5 miles offshore in places. It is advisable to keep in depths greater than 20m along this stretch of coast.

Ponta Maunhane (12° 58'S., 40° 35'E.) is a bluff point marked by a light; a stranded wreck lies E of the light.

Pema (12° 58'S., 40° 30'E.)

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3.40 Pema is located on the NE side of the S part of Baía de Pema. The bay is entered between Ponta Romero (12° 57'S., 40° 30'E.) and Ponta Said-Ali, 1.2 miles NNE. Baía de Pema forms one of the finest harbors on this coast, with sufficient water in most parts for deep draft vessels and shelter from all winds. Vessels entering the harbor should pass to the S and W of Baixo Indujo; Monte Mutucua bearing more than 256° will clear the S extremity of the reef.

Winds—Weather.—The land breeze generally blows out of the bay until 0700 or 0800. The prevailing winds from May through September are the Southeast Trade Winds. The winds are strongest during June and July, but never reach gale force. From January through April (the rainy season), the prevailing winds are from the NW, and are usually light.

During the North Monsoon, from the middle of October to the middle of March, the weather is hot, damp, and somewhat oppressive, but the temperature is seldom over 36° C, and generally ranges between 28° to 33° C. Rain falls intermittently throughout the monsoon, the average rainfall on the coast for the season is about 800mm. In the opposite monsoon, from April to September, the weather is cool and pleasant and practically no rain falls.

Tides—Currents.—Because of the depth of water in the entrance of the bay and in the port, the effect of the tides on shipping is negligible

Depths—Limitations.—Ocean-going vessels can be accommodated at a quay which has an alongside depth (1994) of 6.3m

Aspect.—When approaching from seaward, Iocola, a conspicuous conical mountain, 694m high, about 30 miles SW of Ponta Maunhane, in range, with the entrance, bearing 234°, forms a useful mark. A concrete water tower, standing about 1 mile SW of Ponta Romero, is conspicuous when approaching from NE, but is not visible S of Ponta Maunhane. A red brick church with a tower, standing about 1.2 miles SSW of Ponta Romero, is conspicuous when viewed from W of that point.

Pilotage.—Pilotage is compulsory for all vessels entering Pema. No pilots are stationed at Pema. Pilots should be ordered 72 hours in advance from Porto de Nacala. Pilots board arriving vessels at Porto de Nacala; southbound departing vessels disembark the pilot at Porto de Nacala. The pilot remains in Pema until the vessel departs.

Vessels from the N should order their pilot from Porto de Nacala.

Anchorage.—Sheltered anchorage may be obtained in the S part of Pema, in about 26m, about 0.2 mile S of the wharf, but the approach within 230m of the wharf must be kept clear for vessels berthing. Anchorage may also be obtained in the N part of the bay, in from 16 to 29m, taking care to avoid Pantaloon Shoal. Vessels should not approach Baxio Pinguim (Penguin Shoal) closer than 0.2 mile.

Caution.—The isolated dangers in the harbor are well-charted; they may best be seen on the chart.

Arquipelago de Quirimba

3.41 Arquipelago de Quirimba (Arquipelago das Querimbais), a chain of islands and reefs, fronts the coast for about 110 miles from Porto da Arimba to about 4 miles S of Cabo Delgado. The islands are generally low, well-wooded, often undulating, and easily seen from seaward. The coast of the mainland abreast the islands is generally low, and can rarely be distinguished when passing outside the outer reefs, and, as the seaward edges of the latter are steep-to, caution is necessary, even by day, when navigating in the vicinity.

Vessels on passage along this coast will gain nothing by using the passages between the islands N of Cabo Pequene (11° 51'S., 40° 31'E.), but should that be necessary, the most favorable time to make the passages is at LW, with the sun astern of the vessel; constant sounding is necessary.

Tides—Currents.—Within the outer islands, the tidal currents are weak and are greatly influenced by the winds. The westgoing tidal current, or that of the rising tide, is usually the stronger, and enters the archipelago by the various openings between the reefs. The normal S current will be experienced about 10 miles outside the outer reefs, until about 20 miles S of Cabo Delgado.

Pema to Porto do Ibo

3.42 Ponta do Diabo (12° 45'S., 40° 38'E.) is situated 13 miles NNE of Ponta Said-Ali; a light stands on Ponta do Diabo.

Ilha Quipaco (12° 41'S., 40° 37'E.) lies on the S end of a reef about 4 miles NNW of Ponta do Diabo. There are some bare hills, with sand patches on them, on the island.

Baía do Quipaco is entered between the S end of Ilha Quipaco and a point 1 mile SSW. It is advisable to enter the bay at LW, passing close S of the island, and anchoring almost immediately after passing the island.

Ilha Quisiva (12° 36'S., 40° 37'E.) is a low island situated 5 miles N of Ilha Quipaco; the ruins of a settlement are located on its W side.

Porto da Arimba is entered between **Ponta Nangamba** (12° 38'S., 40° 36'E.) and Ilha Quisiva, about 1.7 miles N, through a narrow channel, with depths of 3.7m. There is a narrow channel between Ilha Quisiva and Ilha Mefunvo, about 2 miles NNW, with a depth of 5.5m in it. Small vessels may obtain anchorage, in 5m, in a narrow area between the W edge of the reef surrounding Ilha Quisiva and Ilha Mefunvo and the E edge of the bank which fringes the W shore. Vessels are advised to enter Porto da Arimba at LW.

Ilha Mefunvo (12° 33'S., 40° 36'E.), the highest of all the islands in the vicinity, is covered with thick green scrub. It lies at the extremity of a drying bank which forms the N side of Porto da Arimba.

Massundji-Macula (12° 27'S., 40° 39'E.) is a group of above-water rocks

Ilha Quilaluia lies about 2 miles N of Ilha Mefunvo. Temporary anchorage may be obtained, in 24m, coral, about 1 mile SE of the S extremity of Ilha Quilaluia, and about 0.3 mile from the edge of a reef.

Porto do Ibo (12° 20'S., 40° 37'E.)

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3.43 Porto do Ibo is located between Ilha do Ibo and Ilha Matemo on the E and the mainland on the W. The port consists of a town and a very small natural harbor.

Wind—Weather.—The unhealthy season is from the middle of January to the middle of March; during this period there is a considerable rainfall accompanied by thunder and lightning.

Tides—Currents.—The tidal currents run strong in Canal do Sul. In the channel, the incoming tidal current sets toward Baxio de Sao Goncalo and the outgoing tidal current sets toward Mujaca Shoal.

Aspect.—Ilha do Ibo is low and flat, but the lighthouse on Ilha Mujaca shows up well against the dark green vegetation. The coconut palms in the town of Ibo, about 2 miles W of Ilha Mujaca, are conspicuous, as is the white Forte de Sao Joao at the NW end of the town, which presents a long front when seen from NE. Porto do Ibo Light is shown on the W end of Ilha do Ibo, about 0.5 mile S of Forte de Sao Joao.

The land within the coast between Ponta Quissanga and Ponta Quirimisi is moderately high and backed by a range of hills which are visible at a distance of 20 miles. The S end of the range terminates in a bluff, with a conical hill close S of it.

Pilotage.—There are no pilots available. Local knowledge is recommended. Vessels without local knowledge should enter during daylight only.

Signals.—Ibo Light is exhibited on Ilha Mujaca. There is a signal station at the lighthouse, which is connected by telephone to the town of Ibo.

Anchorage.—Fair anchorage, although exposed to E winds, may be obtained, in 11 to 24m, about 5 miles WNW of Ilha Mujaca. Anchorage may be obtained off the NW side of Ilha Matemo, in depths from 9 to 11m, about 0.5 mile SW of Ponta Ucaia (12° 12'S., 40° 34'E.).

Directions.—No difficulty should be experienced in entering Porto do Ibo if the buoys are in position, but if not, vessels are advised to enter the harbor at or near LW.

Caution.—Baixo de Sao Goncalo, when covered, is marked by breakers or by discolored water.

Porto do Ibo to Cabo Delgado

3.44 Ilha das Rolas (12° 09'S., 40° 34'E.) affords sheltered anchorage, in depths from 8 to 13m, at a distance of between 1 mile and 2 miles SSW of the SW extremity of Ilha das Rolas.

Caution.—Vessels can approach the anchorage with the S extremity of Ilha das Rolas bearing W and then alter to 240° on a distant peak to pass between that island and Ilha Matemo. Caution is required, however, to avoid the detached shoals off the reef bordering the N side of the latter island.

Between Ponta Quirimisi (12° 12'S., 40° 31'E.) and Ponta Pangane, the coast is higher than that between Ponta Quirimisi and Ponta Quissanga. The coast between Ponta Pangane and Cabo Delgado is seldom seen outside the islands.

Saint-Lazarus Bank (12° 08'S., 41° 22'E.) has a least depth of 6.4m at its N.

Baixo Zala (12° 06'S., 40° 35'E.), a reef which dries, lies 3 miles NNE of Ilha das Rolas, at the SW end of a rocky bank which is in a depths of 5.5m or less.

Ilha Macaloe (11° 59'S., 40° 35'E.) is surrounded by an extensive drying reef.

Baía de Medjumbe is entered between Ilha Dejumbe and Baixo Vadias, 5 miles N.

Passagem de Medjumbe which leads between the reefs extending N from Ilha Dejumbe (11° 47'S., 40° 38'E.) and S from Baixo Vadias into Baía de Medjumbe, is clear of dangers over a width of 4 miles.

When approaching from seaward, the mainland is indistinct but the high trees on Ilha Dejumbe may be clearly seen; the sides of the pass are marked by heavy surf on the edges of the reefs.

3.45 Ilha Quissanga (11° 49'S., 40° 34'E.) lies about 2 miles W of Ilha Dejumbe. Good anchorage may be taken at least 0.5 mile W of Ilha Quissanga, in 14.6m, sand and shells, with the islet and the tall trees on Ilha Dejumbe in line bearing 079°. This anchorage may be safely approached either by the channel between Cabo Pequene and Ilha Quissanga, or by Passagem de Medjumbe, but in the latter case, care must be taken to avoid Rocha Gray, about 2.5 miles NNW of Ilha Dejumbe Light.

Anchorage may also be obtained, in depths from 9 to 27m, sand and coral, anywhere in the area within Passagem de Medjumbe.

Passagem de Nameguo (11° 33'S., 40° 37'E.) lies between Baixo Varuni and Baixo Nameguo. Good anchorage, in depths from 9 to 22m, sand and coral, may be obtained within Passagem de Nameguo; the best berths depend on the monsoon, due to the prevailing strong winds being NE and SE. A good berth is in depths from 12 to 16m, off the W side of Baixo Nameguo, and anchorage, in similar depths, may also be obtained E of the SE extremity of Baixo Magive Cobua.

Passagem de Tambuzi (11° 26'S., 40° 39'E.) is divided into two parts by Baixo Bower, which may be avoided by not bringing the S extremity of Ilha Mionge (11° 25'S., 40° 31'E.) between the bearings of 261° and 275°. There is good anchorage about 1.5 miles W of Ilha Tambuzi, in 16m, sand and coral, with the summit of Ilha Mionge bearing 234°.

Pedra Messassari is a very dark and almost square rock, about 0.9m high and conspicuous, which lies about 3 miles NE of Ilha Mionge.

3.46 Baía de Mocimboa da Praia is entered through **Passagem de Mionge** (11° 23'S., 40° 31'E.), which leads between the reefs extending N from Ilha Mionge and those extending S from Ilha Mechanga, 1 mile N.

The outer approaches to Baía de Mocimboa da Praia are formed between Cabo Ulu (11° 24'S., 40° 28'E.) and Cabo Mesangi. Passagem de Tambuzi is the principal approach, but Passagem de Nameguo is also available for vessels from S.

Passagem de Suna and Passagem de Niuni are available to vessels coming from N. Vessels navigating Passagem de Suna should enter on a midchannel course. Sand Cay and Ilha Makunga lie on the NE edge of a reef close off the E side of Ilha Metundo (11° 10'S., 40° 41'E.); a rock on the reef between them is 7m high and very conspicuous.

3.47 Porto de Mocimboa da Praia (11° 20'S., 40° 20'E.) is located at the mouth of the Rio Muzama at the head of Baía de Mocimboa da Praia. The port consists of a town and a capacious and sheltered harbor.

The best approach for vessels when entering the harbor is through Passagem de Tambuzi.

Approaches can be made through Passagem de Suna and Passagem de Niuni, but it is not advised without local knowledge due to numerous shallow patches.

Tides—Curr ents.—Within the harbor, the W tidal current on the rising tide is scarcely appreciable, but the E tidal current on the falling tide attains a velocity of from 2 to 3 knots.

Anchorage.—Anchorage may be taken either before entering Passagem de Mionge or inside the passage, in depths from 18 to 22m, mud.

Deep draft vessels should anchor about 3 miles E of Ponta Vermelha, the N entrance point of Mto Mocimboa, a creek at the head of the harbor.

In Baía de Mocimboa da Praia, there is an anchorage area in which there is a least depth of 7.3m.

A 1.5m shoal lies in the anchorage, about 5.5 miles NW of a beacon that marks a rock off the W side of Ilha Mechanga; a 5.5m patch has been reported to lie close to it.

Caution.—Navigational aids are reported (1995) to be unreliable; they may be missing, unlit, or out of position.

3.48 Cabo Messangi (11° 12'S., 40° 31'E.), the N entrance point of Baía de Mocimboa da Praia, is a well-marked point, 14.3m high. It may be recognized by a clump of casuarina trees, 29m high, the most conspicuous object on this part of the coast. Anchorage can be taken, in 14m, about 4 miles E of Cabo Messangi.

Between Cabo Messangi and Cabo Nondo, 10.5 miles NNE, the coast is low and wooded, with an occasional small village surrounded by coconut palms. A sandbank fronts the coast and landing is impracticable except at HW.

Cabo Nondo (11° 02'S., 40° 34'E.) may be easily recognized from the S by a group of casuarina trees, about 24m high.

Passagem de Metundo is entered between Ilha Metundo and Ilha Vamizi. A light is shown from a conspicuous white circular tower on the E end of Ilha Vamizi.

Ilha Vamizi, about 7 miles long in an E-W direction, is 28m high at its E end, wooded, and slightly lower at its W end, which lies 2 miles E of Cabo Nondo. Ilha Vamizi is surrounded by a reef, which extends for about 1 mile from its S side.

The outer part of Passagem de Metundo has depths over 183m, but the depths decrease very rapidly, and there are numerous reefs and shoals on the S side of the entrance and a short distance within the entrance.

Baixo Pinguim (11° 05'S., 40° 39'E.) lies 6.2 miles SE of Cabo Nondo. The channel between Baixo Pinguim and Ilha Vamizi has depths from 10 to 23m; it may be used by larger vessels seeking anchorage in Passagem de Metundo. Other channels may be used by small craft with local knowledge.

3.49 Baía de Maiapa (10° 57'S., 40° 34'E.) is entered between Cabo Nondo and Cabo Afungi. The shores of the bay are bordered by extensive sandflats, which with Baixo Mepanga-Panga (10° 59'S., 40° 37'E.), Ilha Queramimbi, and its surrounding reef, together with numerous deep holes of 37m to 55m, limit the anchorage to a comparatively small area, suitable for small vessels with local knowledge.

Baía de Maiapa is approached through Passagem de Vamizi between Ilha Vamizi and Ilha Rongui. Within the bay, tidal currents set SW on the rising tide and NE on the falling tide at rates of 1 to 2 knots at springs.

Anchorage.—Anchorage in depths of 16.5m, sand and coral, may be obtained about 1 mile N of Baixo Mepanga-Panga; the SW side of the bank is marked by a beacon.

Ilha Rongui (10° 52'S., 40° 40'E.) and Ilha Tekomadji lie, respectively, 2.2 miles ESE and 2.7 miles NE of Cabo Afungi. When approaching these islands from seaward, the only distinguishing features are clumps of trees, 29m high, on the NE part of Ilha Rongui; when within 6 miles, trees may be seen on the E shore of Ilha Tekomadji.

3.50 Baía de Tungue is entered between **Cabo Afungi** (10° 49'S., 40° 37'E.) and Cabo Delgado.

Winds—Weather.—Northeast winds from December to March became lighter as the season progressed and were varied, occasionally, by heavy squalls of wind and rain from NW, accompanied by vivid lightning and heavy thunder.

The change of monsoon takes place in April; heavy squalls then frequently occur from S and SW, but by the beginning of May, the steady South Monsoon has set in, the wind generally

freshening in the afternoon to a strong breeze, and from this month the force gradually lessens and the wind veers to the E.

By October very light E winds prevail, the change to the Northeast Monsoon taking place gradually in the early part of November, accompanied by a few light showers.

Between the islands and the mainland, sea and land breezes prevail; the former, during May and June, blow very fresh.

Tides—Currents.—In Baia de Tongue, the tidal current of the rising tide sets SSW, and that of the falling tide sets N by E, at velocities of from 1 to 2 knots.

Aspect.—The head of the bay is backed by a wooded ridge, which forms the highest ground in the vicinity. The land within the S shore of the bay is low and flat, but adjoining the N shore it rises to elevations of between 24 and 61m.

Anchorage.—Good anchorage can be found, in about 18m, with even bottom, with the flagstaff at Palma bearing 260°, distant 3.5 miles. Small vessels can anchor, in 7m, about 1.2 miles W of the westernmost point of Ilha Tekomadji.

Cabo Delgado (10° 41'S., 40° 38'E.) is described in paragraph 4.2.